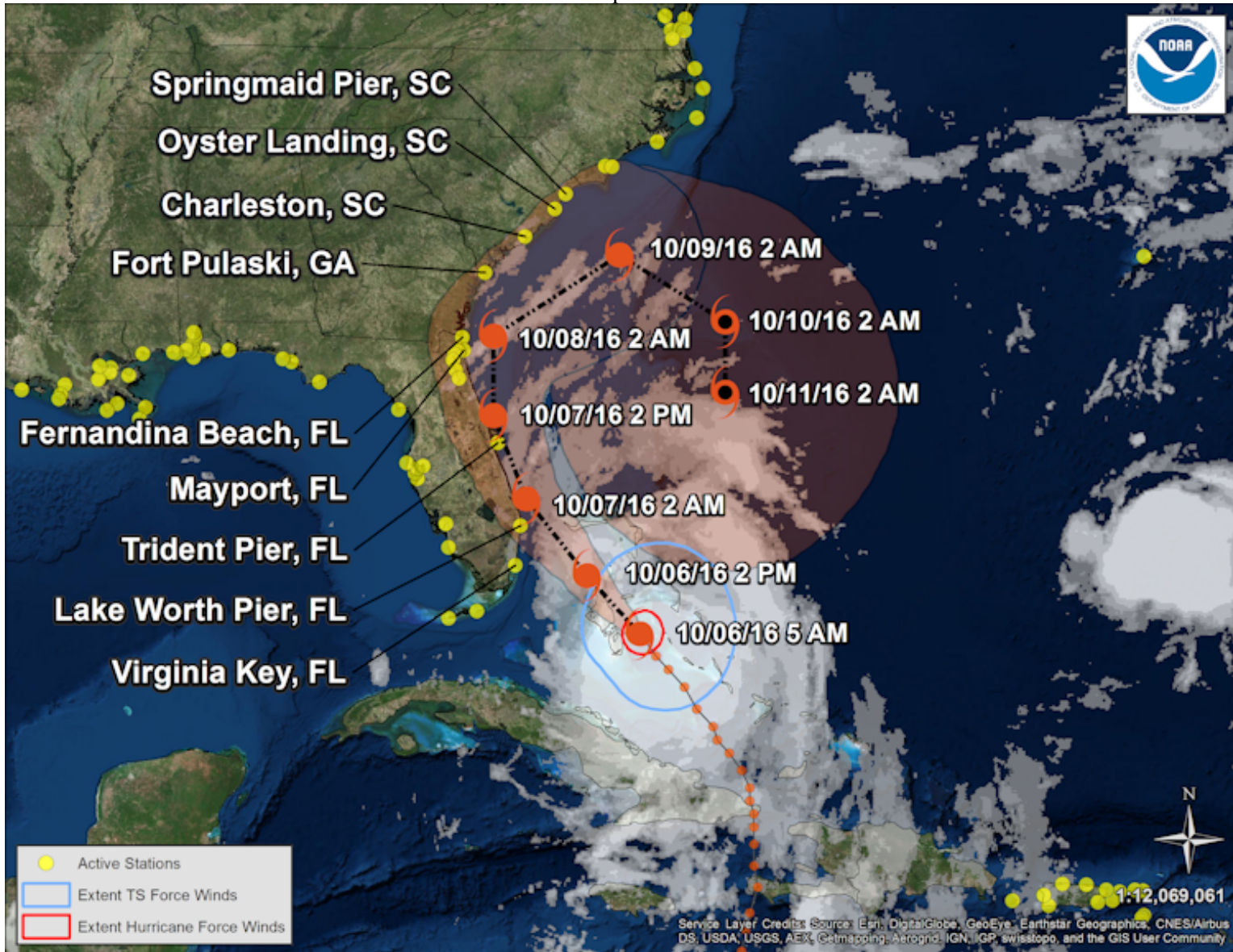




Hurricane MATTHEW QuickLook Posted: 06:00 EDT 10/06/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 10/06/2016 06:00 EDT, water levels along the coast from south of Trident Pier, FL range from .6 to 1 feet above normal tide levels. North of Trident Pier, FL through South Carolina water levels range from 1.2 to 2.75 ft above normal tide levels. Winds are currently measuring between 10 and 20 kts with gusts up to 30 kts in Mayport, FL. Barometric pressure is beginning to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst:ADM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE MATTHEW ADVISORY NUMBER 33
NWS NATIONAL HURRICANE CENTER MIAMI FL
500 AM EDT THU OCT 06 2016

...RECONNAISSANCE AIRCRAFT FINDS MATTHEW STRENGTHENING NEAR THE NORTHWESTERN BAHAMAS...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Hurricane Warning has been extended northward to Altamaha Sound, Georgia, and the Hurricane Watch has been extended northward to South Santee River, South Carolina.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- * Southeastern Bahamas, including the Inaguas, Mayaguana, Acklins, Crooked Island, Long Cay, and Ragged Island
- * Central Bahamas, including Long Island, Exuma, Rum Cay, San Salvador, and Cat Island
- * Northwestern Bahamas, including the Abacos, Andros Island, Berry Islands, Bimini, Eleuthera, Grand Bahama Island, and New Providence
- * North of Golden Beach Florida to Altamaha Sound Georgia
- * Lake Okeechobee

A Hurricane Watch is in effect for...

- * North of Altamaha Sound to South Santee River South Carolina

A Tropical Storm Warning is in effect for...

- * Chokoloskee to Golden Beach
- * Florida Keys from Seven Mile Bridge eastward
- * Florida Bay

A Tropical Storm Watch is in effect for...

- * North of Chokoloskee to Suwannee River

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued

48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area.

Interests elsewhere in the Florida Peninsula, the Florida Keys, and in the Carolinas should monitor the progress of Matthew.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 AM EDT, the center of Hurricane Matthew was located ABOUT 60 MI SSE OF NASSAU and ABOUT 255 MI SE OF WEST PALM BEACH FLORIDA. Matthew is moving toward the northwest near 12 mph, and this general motion is expected to continue today. A turn toward the north-northwest is expected tonight. On the forecast track, the eye of Matthew should pass near Andros Island and New Providence in the northwestern Bahamas early this morning, then pass near Grand Bahama Island late today, and move very close to the east coast of the Florida peninsula tonight through Friday night.

Reports from an Air Force Reserve Hurricane Hunter aircraft indicate that the maximum sustained winds have increased to near 125 mph with higher gusts. Matthew is a category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale. Additional strengthening is expected during the next day or so, and Matthew is forecast to be a category 4 hurricane as it approaches the east coast of Florida.

Hurricane-force winds extend outward up to 40 miles from the center and tropical-storm-force winds extend outward up to 160 miles.

The latest minimum central pressure estimated from reconnaissance aircraft data is 944 mb.

HAZARDS AFFECTING LAND

WIND: Hurricane conditions will continue over the central Bahamas and spread into the northwestern Bahamas today. Winds will gradually diminish over the southeastern Bahamas this morning.

Hurricane conditions are expected to first reach the hurricane warning area in Florida by late today and will spread northward within the warning area through Friday. Tropical storm conditions are first expected in Florida by late this morning.

Hurricane conditions are possible in the hurricane watch area in northeast Georgia and South Carolina by early Saturday, with tropical storm conditions possible on Friday night.

Tropical storm conditions are possible in the tropical storm watch area on the Florida Gulf Coast beginning later today.

STORM SURGE: The combination of a dangerous storm surge and large and destructive waves could raise water levels by as much as the following amounts above normal tide levels...

Central and Northwestern Bahamas...10 to 15 feet

The water could reach the following heights above ground if the peak surge occurs at the time of high tide...

Sebastian Inlet to Savannah River, including portions of the St.

Johns River...6 to 9 ft

Savannah River to South Santee River...3 to 5 ft

Deerfield Beach to Sebastian Inlet...3 to 5 ft

Virginia Key to Deerfield Beach...1 to 3 ft

Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. Large waves generated by Matthew will cause water rises to occur well in advance of and well away from the track of the center.

The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. There is a danger of life-threatening inundation during the next 36 hours along the Florida east coast and Georgia coast from Deerfield Beach to Altamaha Sound.

There is the possibility of life-threatening inundation during the next 48 hours from north of Altamaha Sound to South Santee River. For a depiction of areas at risk, please see the Prototype National Weather Service Storm Surge Watch/Warning Graphic. For information specific to your area, please see products issued by your local National Weather Service forecast office.

The Prototype Storm Surge Watch/Warning Graphic is a depiction of areas that would qualify for inclusion under a storm surge watch or warning currently under development by the National Weather Service and planned for operational use in 2017. The Prototype Graphic is available at hurricanes.gov.

RAINFALL: Matthew is expected to produce total rainfall amounts in the following areas:

The Bahamas...8 to 12 inches, isolated totals of 15 inches

Coastal eastern Florida, Georgia, and South Carolina...4 to 8 inches, isolated totals of 12 inches

The Florida Keys...1 to 3 inches, isolated totals of 5 inches

Eastern Cuba...additional 2 to 4 inches, isolated storm-totals of 20 inches

Central Cuba...additional 2 to 4 inches, isolated storm-totals of 8 inches

Turks and Caicos Islands...less than one additional inch, isolated storm-totals of 8 inches

Life-threatening flash floods and mudslides are likely in central and eastern Cuba.

SURF: Swells generated by Matthew will continue to affect portions of the north coast of Cuba and the Bahamas during the next few days, and will spread northward along the east coast of Florida and the southeast U.S. coast through the weekend. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

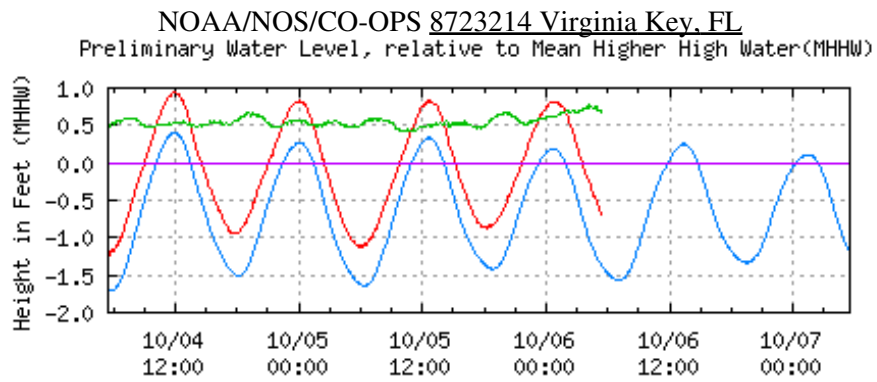
Next intermediate advisory at 800 AM EDT.

Next complete advisory at 1100 AM EDT.

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For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Virginia Key - Water Level](#), [Virginia Key - Winds](#), [Virginia Key - Barometric](#), [Lake Worth Pier - Water Level](#), [Lake Worth Pier - Winds](#), [Trident Pier - Water Level](#), [Trident Pier - Winds](#), [Trident Pier - Barometric](#), [Mayport \(Bar Pilots Dock\) - Water Level](#), [Mayport \(Bar Pilots Dock\) - Winds](#), [Fernandina Beach - Water Level](#), [Fernandina Beach - Winds](#), [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Oyster Landing \(N Inlet Estuary\) - Water Level](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#)



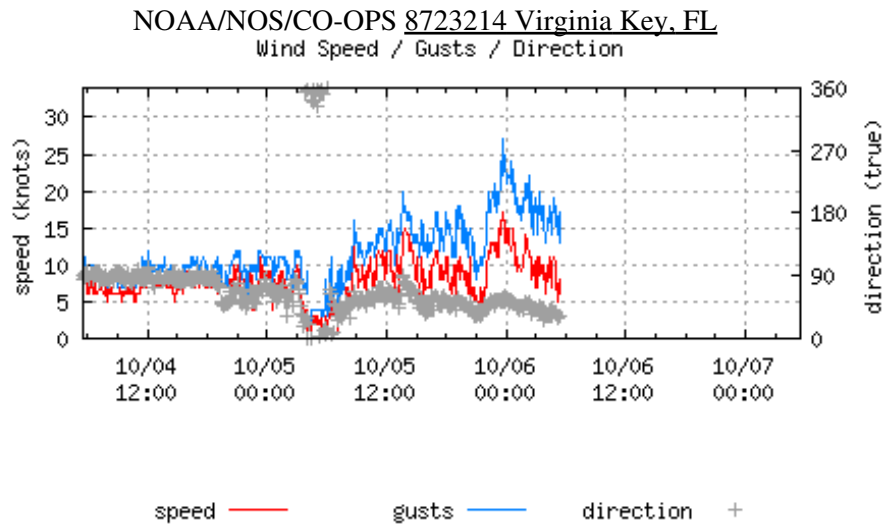
Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/06/2016 05:30 (EDT). Data relative to MHHW

Observed: -0.70 ft. Predicted: -1.39 ft. Residual: 0.69 ft.

Historical Maximum Water Level: Oct 24 2005, 2.58 ft.

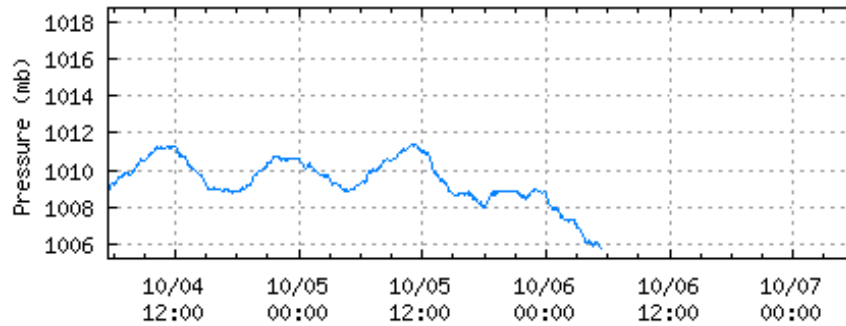
Next High Tide: 10/06/2016 13:23 (EDT), 0.25 ft.



Last Observed Sample: 10/06/2016 05:30 (EDT)

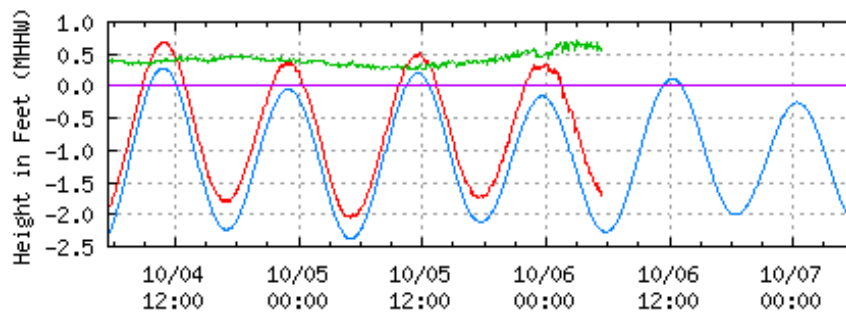
Wind Speed: 10 knots Gusts: 15 knots Direction: 26° T

NOAA/NOS/CO-OPS 8723214 Virginia Key, FL
Barometric Pressure



barometric pressure —
Last Observed Sample: 10/06/2016 05:30 (EDT)
Barometric Pressure: 1005.6 mb

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

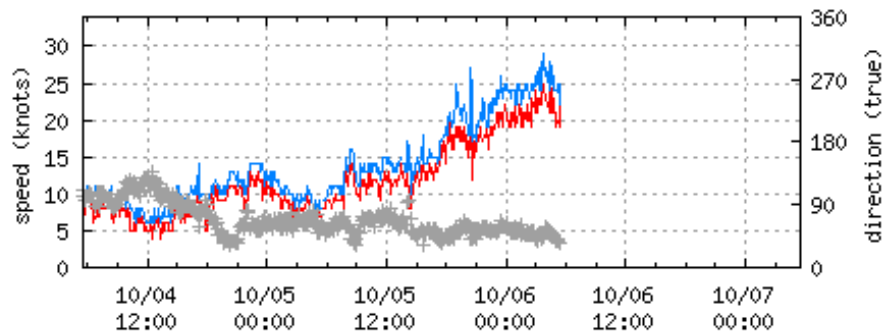


Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW
Observed: -1.70 ft. Predicted: -2.25 ft. Residual: 0.55 ft.
Historical Maximum Water Level: Nov 23 1984, 1.88 ft.
Next High Tide: 10/06/2016 12:15 (EDT), 0.11 ft.

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL

Wind Speed / Gusts / Direction



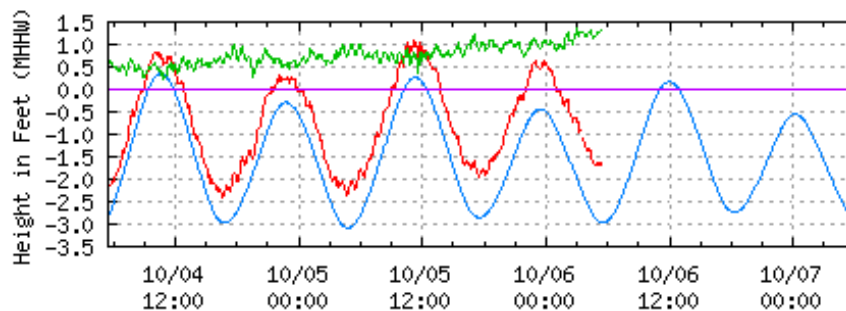
speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

Wind Speed: 22 knots Gusts: 25 knots Direction: 35° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW

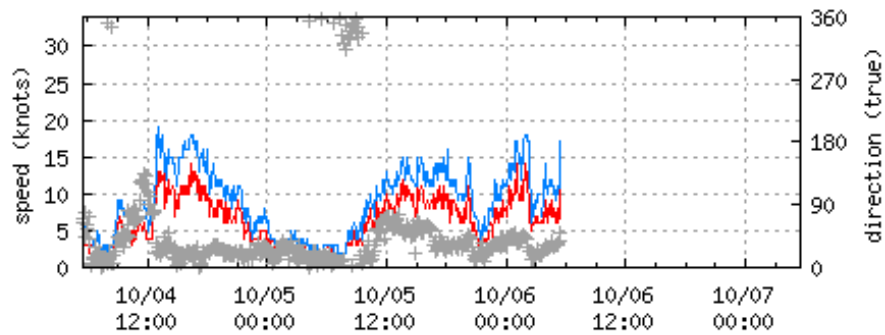
Observed: -1.65 ft. Predicted: -2.96 ft. Residual: 1.31 ft.

Historical Maximum Water Level: Sep 26 2004, 4.01 ft.

Next High Tide: 10/06/2016 11:59 (EDT), 0.17 ft.

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Wind Speed / Gusts / Direction



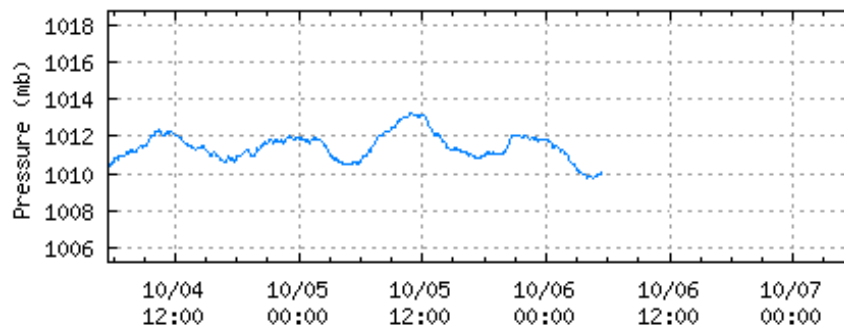
speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

Wind Speed: 13 knots Gusts: 17 knots Direction: 50° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Barometric Pressure

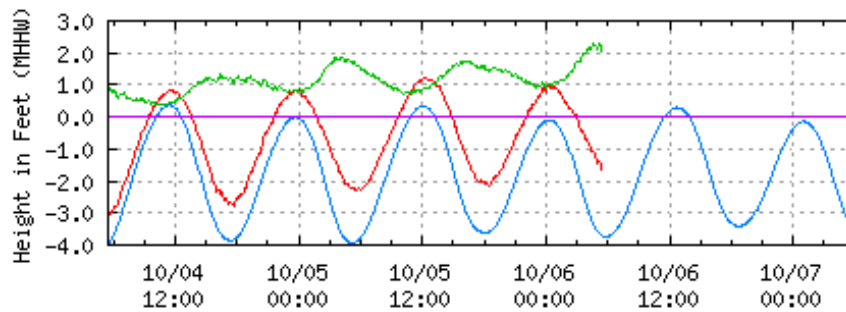


barometric pressure —

Last Observed Sample: 10/06/2016 05:24 (EDT)

Barometric Pressure: 1010.1 mb

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

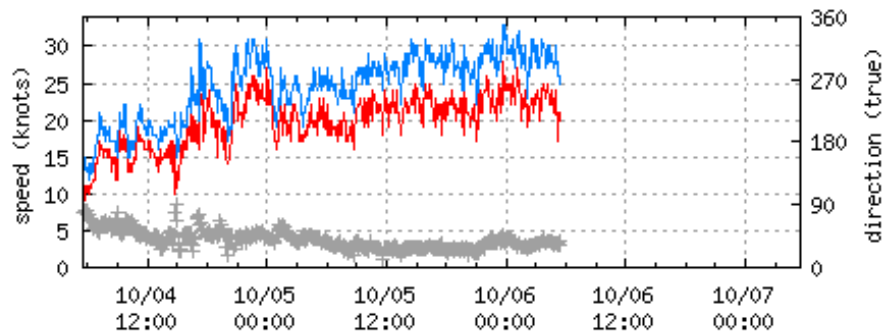
Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW

Observed: -1.64 ft. Predicted: -3.70 ft. Residual: 2.06 ft.

Historical Maximum Water Level: Sep 27 2004, 2.47 ft.

Next High Tide: 10/06/2016 12:43 (EDT), 0.30 ft.

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL
Wind Speed / Gusts / Direction

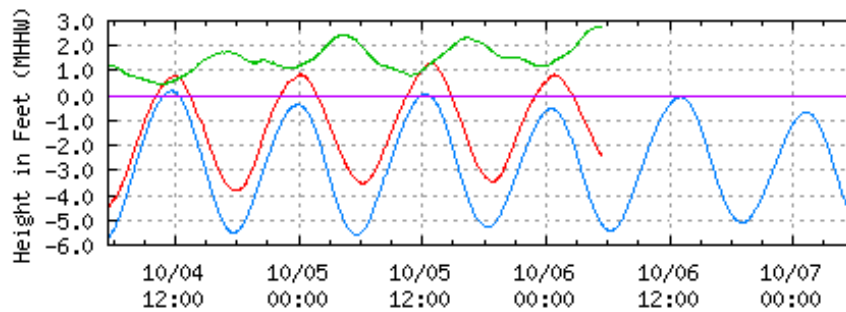


speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

Wind Speed: 20 knots Gusts: 25 knots Direction: 32° T

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

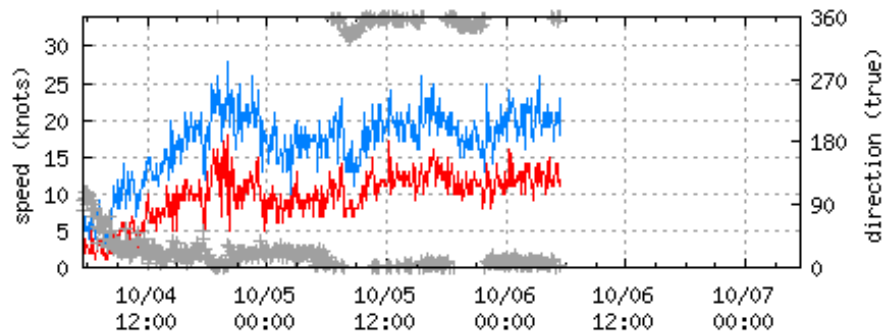
Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW

Observed: -2.41 ft. Predicted: -5.16 ft. Residual: 2.75 ft.

Historical Maximum Water Level: Oct 2 1898, 6.94 ft.

Next High Tide: 10/06/2016 13:01 (EDT), -0.06 ft.

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL
Wind Speed / Gusts / Direction

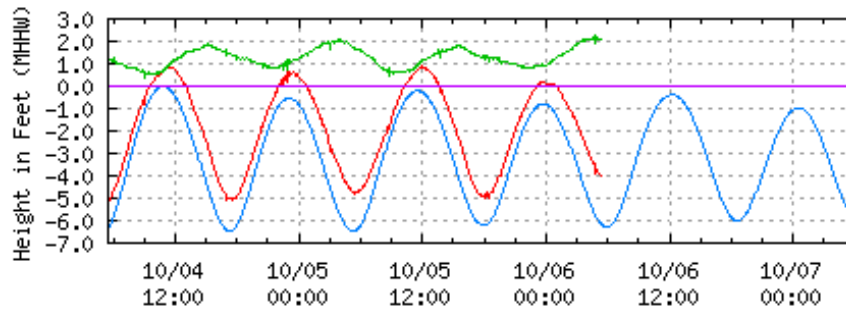


speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

Wind Speed: 12 knots Gusts: 23 knots Direction: 360° T

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

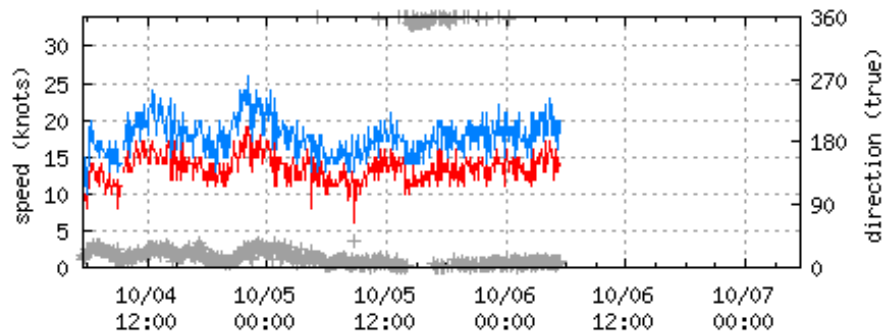
Last Observed Sample: 10/06/2016 05:18 (EDT). Data relative to MHHW

Observed: -4.00 ft. Predicted: -6.13 ft. Residual: 2.13 ft.

Historical Maximum Water Level: Oct 15 1947, 3.40 ft.

Next High Tide: 10/06/2016 12:14 (EDT), -0.38 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA
Wind Speed / Gusts / Direction

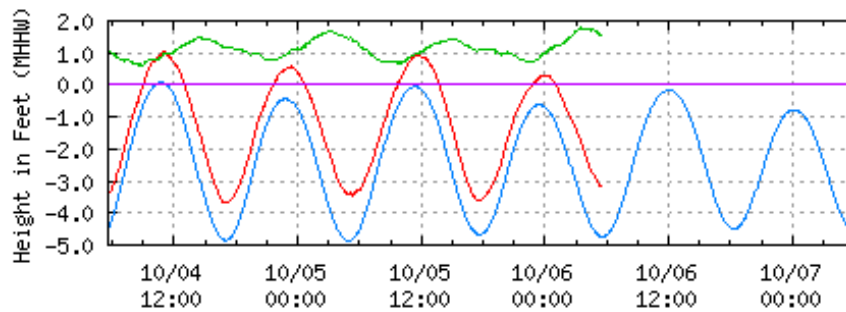


speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:18 (EDT)

Wind Speed: 14 knots Gusts: 20 knots Direction: 8° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

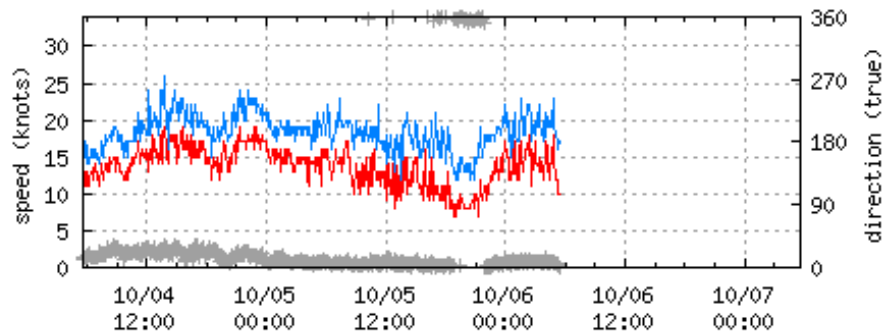
Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW

Observed: -3.16 ft. Predicted: -4.72 ft. Residual: 1.56 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 10/06/2016 12:03 (EDT), -0.17 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Wind Speed / Gusts / Direction

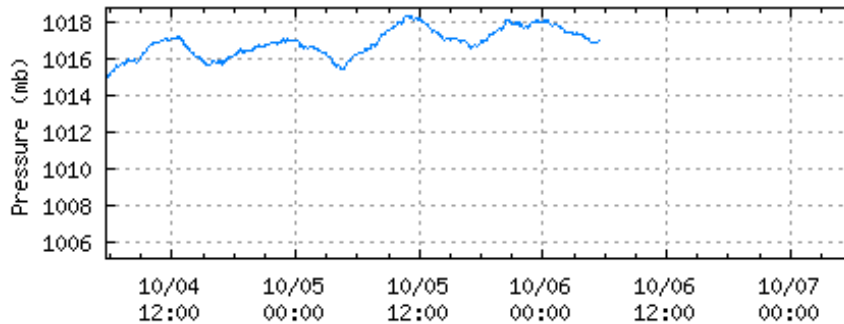


speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

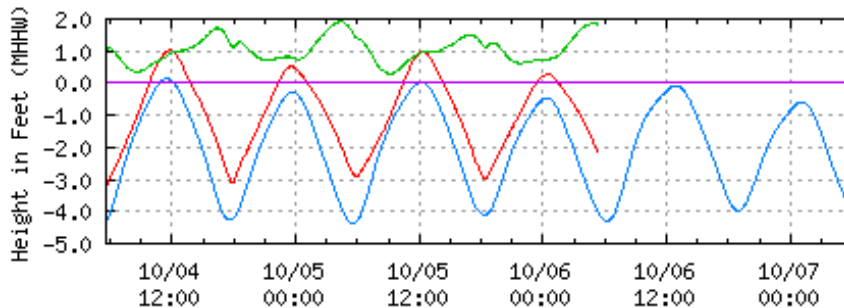
Wind Speed: 10 knots Gusts: 17 knots Direction: 1° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Barometric Pressure



barometric pressure —
Last Observed Sample: 10/06/2016 05:24 (EDT)
Barometric Pressure: 1017.0 mb

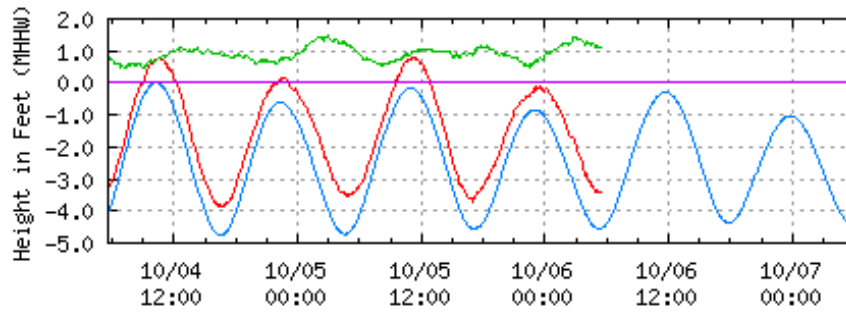
NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/06/2016 05:18 (EDT). Data relative to MHHW
Observed: -2.16 ft. Predicted: -3.99 ft. Residual: 1.83 ft.
Historical Maximum Water Level: Aug 26 2011, 2.40 ft.
Next High Tide: 10/06/2016 12:54 (EDT), -0.07 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

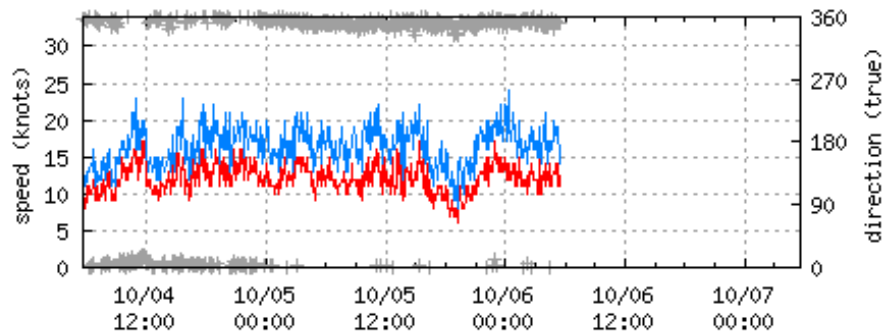
Last Observed Sample: 10/06/2016 05:24 (EDT). Data relative to MHHW

Observed: -3.44 ft. Predicted: -4.54 ft. Residual: 1.10 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft.

Next High Tide: 10/06/2016 11:42 (EDT), -0.30 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC
Wind Speed / Gusts / Direction



speed — gusts — direction +

Last Observed Sample: 10/06/2016 05:24 (EDT)

Wind Speed: 11 knots Gusts: 14 knots Direction: 350° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8723214	Virginia Key, FL	10/06/2016 05:30 (EDT)	-0.70 ft	-1.39 ft	0.69 ft	0.83 ft
8722670	Lake Worth Pier, FL	10/06/2016 05:24 (EDT)	-1.70 ft	-2.25 ft	0.55 ft	0.53 ft
8721604	Trident Pier, FL	10/06/2016 05:24 (EDT)	-1.65 ft	-2.96 ft	1.31 ft	1.11 ft
8720218	Mayport (Bar Pilots Dock), FL	10/06/2016 05:24 (EDT)	-1.64 ft	-3.70 ft	2.06 ft	1.22 ft
8720030	Fernandina Beach, FL	10/06/2016 05:24 (EDT)	-2.41 ft	-5.16 ft	2.75 ft	1.26 ft
8670870	Fort Pulaski, GA	10/06/2016 05:18 (EDT)	-4.00 ft	-6.13 ft	2.13 ft	0.87 ft
8665530	Charleston, SC	10/06/2016 05:24 (EDT)	-3.16 ft	-4.72 ft	1.56 ft	0.92 ft
8662245	Oyster Landing (N Inlet Estuary), SC	10/06/2016 05:18 (EDT)	-2.16 ft	-3.99 ft	1.83 ft	0.99 ft
8661070	Springmaid Pier, SC	10/06/2016 05:24 (EDT)	-3.44 ft	-4.54 ft	1.10 ft	0.81 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce